

CLAIMS

What is claimed is:

1 1. An intelligent remote caller identification system, comprising:
2 a central office operable to trigger a query responsive to receiving a
3 call request;
4 a service control point coupled to the central office, the service control
5 point operable to receive the query, and trigger an internet call routing query;
6 an internet call routing system coupled to the service control point, the
7 internet call routing system operable to receive the internet call routing query,
8 determine presence of a called party with respect to at least one registered
9 communication device, and send an internet-based message to the called party at said
10 at least one registered communication device responsive to the presence
11 determination.

1 2. The system of claim 1, further comprising a certificate authority
2 coupled to the internet call routing system, the certificate authority being operable to
3 authenticate the called party by searching a customer database for current subscription
4 and payment information.

1 3. The system of claim 1, further comprising a presence engine coupled
2 to the internet call routing system, the presence engine being operable to determine
3 the presence of any of said at least one registered communication device.

1 4. The system of claim 1, wherein the internet call routing query
2 comprises an account number associated with the called party, a phone number
3 associated with the called party, a registration identification associated with the called
4 party, and a certificate associated with the called party.

1 5. The system of claim 1, further comprising a gateway coupled between
2 the service control point and the internet call routing system, the gateway being
3 operable to translate protocols between the SS7 protocol and the internet protocol.

1 6. The system of claim 1, further comprising at least one of a short
2 message service server, an electronic mail server, an instant messaging server and a
3 simple object access protocol server, said server(s) being coupled to the internet call
4 routing system, and being operable to forward an internet-based message to a
5 registered communication device responsive to instructions from the internet call
6 routing system.

1 7. An internet call routing system, comprising:
2 receive logic operable to receive a call query from a service control
3 point via a gateway;
4 presence logic coupled to the receive logic, the presence logic being
5 operable to determine whether a called party associated with the call query is present
6 with respect to at least one registered communication device associated with the
7 called party; and
8 messaging logic coupled to the presence logic, the messaging logic
9 being operable send a message to the called party via said at least one registered
10 communication device responsive to the presence determination.

1 8. The system of claim 7, further comprising:
2 a database operable to store a profile associated with the called party
3 including a list comprising said at least one registered communication device, the
4 database being operable to provide the list associated with the called party to the
5 presence logic.

1 9. The system of claim 7, wherein the messaging logic is at least one of a
2 short message server, an electronic mail server, a simple object access protocol server,
3 and an instant messaging server.

1 10. The system of claim 7, wherein the call query comprises an account
2 number associated with the called party, a phone number associated with the called
3 party, a registration identification associated with the called party, and a certificate
4 associated with the called party.

1 11. The system of claim 10, further comprising:

2 authentication logic coupled to the receive logic, the authentication
3 logic operable to employ the certificate associated with the called party to authenticate
4 the called party associated with the call query.

1 12. The system of claim 11, wherein the authentication logic authenticates

2 the called party, and assures that the called party continues to subscribe to a service
3 provided by the internet call routing system.

1 13. The system of claim 7, further comprising a rules engine, the rules

2 engine being coupled between the receive logic and the presence logic, the rules
3 engine being operable to parse at least one rule associated with the called party, and
4 send instructions to a service control point to connect the call as dialed responsive to
5 the rule parsing.

1 14. The system of claim 7, wherein said at least one registered

2 communication device comprises at least one of an internet connected computer, a
3 cellular phone, an internet protocol phone, and a television set-top box.

1 15. A method of providing caller identification at a remote location,
2 comprising the steps of:
3 receiving a call query from a service control point via a gateway;
4 determining whether the called party is present with respect to at least
5 one registered communication device associated with the called party; and
6 sending a message to the called party via said at least one registered
7 communication device responsive to the presence determination.

1 16. The method of claim 15, wherein the method further comprises:
2 storing a profile associated with the called party including a list
3 comprising said at least one registered communication device, the database being
4 operable to provide the list associated with the called party to the presence logic.

1 17. The method of claim 16, wherein the method further comprises:
2 storing a profile associated with the called party, the profile also
3 including at least one rule for sending the message to the called party.

1 18. The method of claim 17, further comprising:
2 parsing said at least one rule prior to sending the message to the called
3 party; and
4 sending a message to the called party via said at least one registered
5 communication device responsive to the parsing and the presence determination.

1 19. The method of claim 18, wherein the message is an internet-based
2 message.

1 20. The method of claim 15, further comprising:

2 using at least one of a short message server, an electronic mail server, a
3 simple object access protocol server, and an instant messaging server, to send the
4 message to the called party via said at least one registered communication device
5 responsive to the presence determination..

1 21. The method of claim 20, wherein said at least one registered

2 communication device includes at least one of a computer with internet connectivity,
3 a cellular phone, an internet protocol phone, and a television set-top box.

1 22. The method of claim 15, wherein the call query comprises an account

2 number associated with the called party, a phone number associated with the called
3 party, a registration identification associated with the called party, and a certificate
4 associated with the called party.

1 23. The method of claim 22, further comprising using the certificate

2 associated with the called party to authenticate the called party.

1 24. A computer readable medium having a program for providing caller
2 identification at a remote location, the program comprising the steps of:
3 receiving a call query from a service control point via a gateway;
4 determining whether the called party is present with respect to at least
5 one registered communication device associated with the called party; and
6 sending a message to the called party via said at least one registered
7 communication device responsive to the presence determination.

1 25. The program of claim 24, wherein the method further comprises:
2 storing a profile associated with the called party including a list
3 comprising said at least one registered communication device, the database being
4 operable to provide the list associated with the called party to the presence logic.

1 26. The program of claim 25, wherein the method further comprises:
2 storing a profile associated with the called party, the profile also
3 including at least one rule for sending the message to the called party.

1 27. The program of claim 26, further comprising:
2 parsing said at least one rule prior to sending the message to the called
3 party; and
4 sending a message to the called party via said at least one registered
5 communication device responsive to the parsing and the presence determination.

1 28. The program of claim 27, wherein the message is an internet-based
2 message.

1 29. The program of claim 24, further comprising:

2 using at least one of a short message server, an electronic mail server, a
3 simple object access protocol server, and an instant messaging server, to send the
4 message to the called party via said at least one registered communication device
5 responsive to the presence determination..

1 30. The program of claim 29, wherein said at least one registered

2 communication device includes at least one of a computer with internet connectivity,
3 a cellular phone, an internet protocol phone, and a television set-top box.

1 31. The program of claim 24, wherein the call query comprises an account

2 number associated with the called party, a phone number associated with the called
3 party, a registration identification associated with the called party, and a certificate
4 associated with the called party.

1 32. The program of claim 31, further comprising using the certificate

2 associated with the called party to authenticate the called party.